

INTERNATIONAL SEARCH REPORT

International Application No.

PCT/US 03/36478

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 F01N3/28 B01D53/94

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 F01N B01D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

PAJ, EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	PATENT ABSTRACTS OF JAPAN vol. 1999, no. 01, 29 January 1999 (1999-01-29) -& JP 10 288032 A (MITSUBISHI CHEM CORP), 27 October 1998 (1998-10-27) abstract -& DATABASE WPI Week 199902 Derwent Publications Ltd., London, GB; AN 1999-018671 XP002276900 & JP 10 288032 A abstract <div style="text-align: center;">--- -/--</div>	1-15

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

14 April 2004

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, X	WO 03/050397 A (SANE AJIT Y ; SOUNDWICH INC (US); MOORE DAN T III (US)) 19 June 2003 (2003-06-19) page 6, paragraph 29 page 8, paragraph 32; figure 2 ----	1-15
A	PATENT ABSTRACTS OF JAPAN vol. 010, no. 033 (M-452), 8 February 1986 (1986-02-08) & JP 60 187712 A (NISSAN JIDOSHA KK), 25 September 1985 (1985-09-25) abstract ----	1-15
A	US 5 094 074 A (NISHIZAWA KIMIYOSHI ET AL) 10 March 1992 (1992-03-10) column 7, line 10-13; figure 8 ----	1-15
A	US 6 224 835 B1 (LANGER ROGER L) 1 May 2001 (2001-05-01) the whole document -----	

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Information on patent family members

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
JP 10288032	A	27-10-1998	NONE	
WO 03050397	A	19-06-2003	US 2003106311 A1 WO 03050397 A2	12-06-2003 19-06-2003
JP 60187712	A	25-09-1985	NONE	
US 5094074	A	10-03-1992	JP 3245851 A JP 4171214 A	01-11-1991 18-06-1992
US 6224835	B1	01-05-2001	US 6051193 A AU 6244398 A BR 9807177 A CA 2278486 A1 CN 1429971 A CN 1246912 T EP 1314866 A2 EP 0972130 A1 JP 2002514283 T WO 9835144 A1 US 2001046456 A1 US 6365267 B1	18-04-2000 26-08-1998 25-01-2000 13-08-1998 16-07-2003 08-03-2000 28-05-2003 19-01-2000 14-05-2002 13-08-1998 29-11-2001 02-04-2002